

[54] **HYALURONIC ACID PREPARATION TO BE USED FOR TREATING INFLAMMATIONS OF SKELETAL JOINTS**

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[56] **References Cited****U.S. PATENT DOCUMENTS**

3,396,081	8/1968	Billek	536/55.1
4,141,973	2/1979	Balazs	536/55.1
4,328,803	5/1982	Pape	514/54
4,517,295	5/1985	Bracke et al.	536/55.1

FOREIGN PATENT DOCUMENTS

0138572	4/1985	European Pat. Off.
0143393	6/1985	European Pat. Off.

OTHER PUBLICATIONS

Research in Veterinary Science, vol. 30, No. 2, issued 1981 (Oxford), D. A. Gingerich et al., "Effect of Exoge-

nous Hyaluronic Acid on Joint Function in Experimentally Induced Equine Osteoarthritis: Dosage Titration Studies", see pp. 192-197, especially p. 192 and pp. 196-197 (Discussion).

International Journal of Clinical Pharmacology, Therapy and Toxicology, vol. 20, No. 11, issued 1982 (Munich), O. Namiki et al., "Therapeutic Effect of Intra-Articular Injection of High Molecular Weight Hyaluronic Acid on Osteoarthritis of the Knee", see pp. 501-507, especially p. 501 and pp. 504-506 (Discussion). Patent Abstracts of Japan, vol. 7, No. 118, C-167, Abstract of JP 58-37001 (A), published 1983-03-04.

Upsala, Journal of Medical Sciences, Supplement 17, issued 1975 (Uppsala), A. Wigren et al., "Repeated Intra-articular Implantation of Hyaluronic Acid", see pp. 1-20, especially p. 3 and p. 19 (Summary).

Proceedings of the Twenty-Fourth Annual Convention of the American Association of Equine Practitioners, St. Louis, Missouri, Dec. 2-6, 1978, published 1979 by American Association of Equine Practitioners, O. G. Swanström, "Hyaluronate (Hyaluronate Acid) and its Use", see pp. 345-348, especially p. 345, first two paragraphs, and p. 347, second paragraph.

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[57] **ABSTRACT**

Hyaluronic acid preparation containing an effective amount of hyaluronic acid of a molecular weight exceeding 3×10^6 dalton, for intra-articular administration in the treatment of steroid arthropathy and progressive cartilage degeneration caused by proteoglycan degradation.

2 Claims, 1 Drawing Sheet

